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Application No. 10/605,988
Amendment and Response to April 5, 2006 Office Action

Docket No.: 60680-1765

REMARKS

Applicant has reviewed the Office Action, mailed April 6, 2006 and thanks Examiner Patel for his careful review of the pending claims. In this response, Applicant has not canceled or amended any claims. New claims 17 and 18 have been added. Claims 17 and 18 depend from Claims 3 and 9, respectively, and further recite that the expander has a radial thickness greater than the radial width of the cavity that is defined by the upper and lower ring shoulder recesses.

Claims 1-18 remain pending. The new claims are fully supported by Applicant's specification, and no new matter has been added.

Rejection of Claims 1-3 and 6-7 Under 35 U.S.C. § 102(b)

Claims 1-3 and 6-7 have been rejected under 35 U.S.C. § 102(b) as anticipated by Fall (U.S. Patent No. 2,349,903). Applicant respectfully traverses the rejection.

"To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently." *MEHL/Biophile Int'l Corp. v. Milgraum*, 192 F.3d 1362, 1365, 52 USPQ2d 1303 (Fed. Cir. 1999). Independent claims 1 and 9 each recite the limitation "wherein radial compression of said upper and lower rings induces axial expansion" of the claimed expander. Fall does not disclose or suggest this limitation. According to the Examiner, Fall's expander ring 18 meets this limitation. Applicant respectfully disagrees.

First, Fall does not expressly state that its expander ring undergoes axial expansion. Nor does the Examiner assert that it does. Instead, the Examiner apparently contends that Fall *inherently* anticipates Applicant's claims. However, the Examiner has not applied the correct legal standard. The Examiner simply asserts that "Fall teaches that expansion of its expander in an axial direction is possible." Office Action at 3 (emphasis added). *See also* Office Action at 6 ("the expansion of the expander in an axial direction is possible"). "Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing *may* result from a given set of circumstances is not sufficient." *MEHL/Biophile Int'l Corp. v. Milgraum*, 192 F.3d 1362, 1365, 52 USPQ2d 1303 (Fed. Cir. 1999) (emphasis added) (citations omitted);

Application No. 10/605,988
Amendment and Response to April 5, 2006 Office Action

Docket No.: 60680-1765

see also *Transclean Corp. v. Bridgewood Services*, 290 F.3d 1364, 1373, 62 USPQ2d 1865 (Fed. Cir. 2002) (“anticipation by inherent disclosure is appropriate only when the reference discloses prior art that *must necessarily* include the unstated limitation”) (emphasis added); Manual of Patent Examining Procedure (“MPEP”) § 2112, IV (“The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic”) (original emphasis). Thus, even if the Examiner were correct in asserting that Fall’s expander may axially expand, the reference is not anticipatory.

Second, contrary to the Examiner’s assertion, nothing in Fall suggests that axial expansion of expander 18 “is possible.” In support of his rejection, the Examiner relies on the embodiment of Figure 4 from Fall. “The expander ring 18 [of Figure 4] is similar to the expander ring 15 in the form of the invention shown in Figures 1, 2, and 3, but is considerably narrower.” Fall at column 3, lines 15-18. As shown in Figure 1, expander ring 15 has radially directed “corners 15b . . . bearing against the back of the main portions of the ring segments 10 and 11.” Fall at column 2, lines 30-33. Fall indicates that the expander ring expands radially, not axially:

[T]he corners 15b bear against the ring segments 10 and 11, thus pressing the ring segments 10 and 11 radially outwardly with respect to the piston 13. With this arrangement, the exact pressure that may be desired between the ring segments 10 and 11 and the cylinder wall 14 may be secured, and this pressure will be uniformly distributed around the entire circumference of the ring segments.

Fall at column 2, lines 40-48 (emphasis added).

According to the Examiner, Fall inherently anticipates the rejected claims because “the lower ring and the expander have the same structure as claimed by applicants.” This logic is flawed. The rejected claims have certain structural features in common with Fall. However, those similarities do not establish inherent anticipation. The rejected claims recite “wherein radial compression of said upper and lower rings induces axial expansion of said expander.” There is no basis for assuming that Fall will satisfy this limitation simply because it has certain structural features in common with Applicant’s claims. In effect, the Examiner has attempted to write out the “axial expansion” feature of Applicant’s claims, which is improper.

Application No. 10/605,988
Amendment and Response to April 5, 2006 Office Action

Docket No.: 60680-1765

Because Fall does not expressly or inherently disclose each limitation of the rejected it claims, it cannot anticipate them. Therefore, reconsideration and withdrawal of the rejection are respectfully requested.

In addition, new Claims 17 and 18 recite that the expander has a radial thickness that is greater than the radial width of the claimed cavity. Fall does not disclose or suggest this limitation. For this reason as well, Claims 17 and 18 are allowable over Fall.

Rejection of Claims 4, 9-10, 12-13 and 15-16 Under 35 U.S.C. §103

The Examiner has rejected Claims 4, 9-10, 12-13, and 15-16 under 35 U.S.C. §103(a) as being obvious over Fall (U.S. Patent No. 2,349,903) in view of Landon (U.S. Patent No. 2,323,815). First, the combined references do not disclose or suggest--either expressly or inherently--each feature of the rejected claims. "To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). See also *Litton Systems, Inc. v. Honeywell, Inc.*, 87 F.3d 1559, 1569 (Fed. Cir. 1996) (rejecting defendants' obviousness challenge on the grounds that "[t]he prior art simply does not contain may limitations contained in the claimed method"); *Manual of Patent Examining Procedure* (MPEP) at § 2143.03.

Claim 4 depends from Claim 1. Claims 1 and 9 each recite "wherein radial compression of said upper and lower rings induces axial expansion of said expander." For the reasons mentioned above, Fall does not disclose this limitation. Nor does Landon. Landon discloses a corrugated spacer member 3 positioned between two "relatively flat upper and lower oil-control members." Landon, column 2, lines 9-30. Because of the orientation of spacer member 3, it "exhibits some axial resilience." However, nothing in Landon suggests that its flat control members can be radially compressed to induce axial expansion of corrugated spacer member 3. Accordingly, the combined references do not disclose or suggest each limitation of the rejected claims, and therefore, do not render the claims obvious.

Application No. 10/605,988
Amendment and Response to April 5, 2006 Office Action

Docket No.: 60680-1765

Moreover, Claims 4 and 10 recite an expander having “two ends defining an expander gap such that radial compression of said upper and lower rings mates said two ends.” The Examiner does not assert that either Fall or Landon disclose this feature, and neither of them do.

In addition, the Examiner has not properly established a motivation or suggestion in the prior art for combining Fall and Landon. See *Winner International Royalty Corp. v. Wang*, 202 F.3d 1340, 1348 (Fed. Cir. 2000) (citations omitted) (“When an obviousness determination is based on multiple prior art references, there must be a showing of some teaching, suggestion, or reason to combine the references”). “The absence of such a suggestion [to combine references] is dispositive in an obviousness determination.” *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 1579 (Fed. Cir. 1997).

The Examiner contends that it “would have been obvious . . . to have the expander of Fall replaced by the expander of Landon, to provide axial resilience for the expander, a substantial bearing area of the upper and lower rings and to minimize wear.” Office Action at 4. However, one of ordinary skill in the art would not be motivated to replace Fall’s expander with that of Landon for several reasons. First, as explained above, the purpose of Fall’s expander 18 is to “press[] the ring segments 10 and 11 radially outwardly with respect to the piston 13” so that “pressure will be uniformly distributed around the circumference of the ring segments.” Fall at column 3, lines 42-48. However, because Landon’s space member 3 is axially corrugated, it would not provide the radial pressure that Fall requires. Thus, if Fall and Landon were combined in the manner suggested by the Examiner, Fall would not work for its intended purpose. See *In re John R Fritch*, 972 F.2d 1260, 1265 n.12 (Fed. Cir. 1992) (“This court has previously found a proposed modification inappropriate for an obviousness inquiry when the modification rendered the prior art reference inoperable for its intended purpose”).

Second, Landon teaches that its expander must be at least as radially thick as its upper and lower rings. (“Likewise rings which use a spacer having a radial depth less than that of the control segments do not have the desired action, regardless of the materials employed”). Landon at column 2, lines 42-46. In contrast, Fall’s upper and lower rings 10 and 11 are radially thicker (see flanges 10a and 11a) than expander ring 18. Thus, the combination of Fall and Landon would require a modification to Fall’s upper and lower ring geometry which is not suggested by

Application No. 10/605,988
Amendment and Response to April 5, 2006 Office Action

Docket No.: 60680-1765

the prior art. To combine the references as suggested by the Examiner would require a selective combination and redesign of the references which is not motivated or suggested by the prior art. *See In re Ratti*, 270 F.3d 810, 813 (C.C.P.A. 1959). Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

Rejection of Claims 5 and 11 Under 35 U.S.C. § 103(a)

Claims 5 and 11 stand rejected under 35 U.S.C. § 103(a) as being obvious over the combination of Fall and Landon. Claim 5 depends from Claim 1 and includes each of its limitations. Claim 11 depends from Claim 9 and includes each of its limitations. As mentioned above, Fall and Landon do not disclose or suggest an expander wherein radial compression of upper and lower rings induces axial expansion of the expander, as recited in claims 1 and 9. Moreover, the Examiner has not identified any motivation or suggestion in the prior art for modifying Landon and/or Fall to include this feature. For this reason alone, the combined references do not render claims 5 and 11 obvious. *See In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974); *Litton Systems, Inc. v. Honeywell, Inc.*, 87 F.3d 1559, 1569 (Fed. Cir. 1996); *Manual of Patent Examining Procedure* (MPEP) at § 2143.03.

As mentioned above, claim 5 depends from claim 1 and recites additional limitations concerning the angular orientation of the expander legs. Claim 11 depends from claim 9 and recites similar limitations. The Examiner contends that "Discovering an optimum value of a result effective variable involves only routine skill in the art," citing *In re Boesch*, 617 F.2d 272, 276 (C.C.P.A. 1980). However, *Boesch* is inapposite. *Boesch* deals with the case where a particular variable is known to be "result effective." *See Boesch*, 617 F.2d. at 276. In this case the allegedly "result effective variable" is the angle defined by adjacent legs of the claimed expander. However, the Examiner has not shown that the prior art recognized this expander angle to be "result effective." As a result, the particular expander angles claimed by Applicant are not obvious.

CONCLUSION

In view of the foregoing, each of the presently pending claims is believed to be in condition for allowance. Accordingly, the Examiner is respectfully requested to pass the

Application No. 10/605,988
Amendment and Response to April 5, 2006 Office Action

Docket No.: 60680-1765

application to issue.

Applicant believes that any additional fees due with respect to this paper have already been identified in any transmittal accompanying this paper. However, if any additional fees are required which are not so identified, permission is given to charge Deposit Account No. 18-0013, under Order No. 60680-1765, from which the undersigned is authorized to draw.

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